# Prf A gene in Listeria monocytogenes isolated from food

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**Abstract**

**Background:** Listeria is a gram-positive bacterium and a facultative food- borne intracellular pathogen. Prf A gene regulates the expression of other genes and is important in virulence.

**Objective:** The aim of this study was to identify Prf A gene in Listeria monocytogenes isolated from food samples.

**Methods:** This cross - sectional study was conducted in 212 different food samples collected from different cities in 2012. Listeria monocytogenes was isolated using the cold enrichment method. The Prf A gene was identified using polymerase chain reaction (PCR). Data were analyzed using Chi- square test.

**Findings:** Of 212 samples, 41 (%19.33) were positive for Listeria spp. Of 41, 22 (%53.6) were Listeria monocytogenes, 15 (%36.5) were L. innocua, 3 (%7.3) were L. welshimri and 1 (%2.4) was L. seeligeri. The Prf A gene was found in 28.5% of L. monocytogenes isolated from vegetable samples and in 100% L. monocytogenes isolated from other samples.

**Conclusion:** Confirmation of the presence of L. monocytogenes in food and the Prf A gene may be helpful to prevent diseases caused by Listeria.

**Keywords:** Listeria Monocytogenes, Prf A Protein, Polymerase Chain Reaction, Food

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